IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended)   A sound reproduction system comprising a digital audio signal input ~~(1)~~, a digital audio signal processor ~~(2, DSP)~~ and a digital audio signal output, ~~(1)~~ wherein the digital signal processor ~~(2, DSP)~~ comprises a ~~high~~ high-pass (HP) filter ~~(21) with~~ having a pass frequency (f) ~~of~~ between a first and a second frequency, a compressing amplifier ~~(22)~~ for compression and amplification of a signal, at least said amplification being performed after HP filtering, and a clipper for clipping the HP filtered, compressed and amplified signal above a clipping level, wherein the sound reproduction system further comprises a measuring device for measuring background noise, and an adaptor for adapting one or more parameters (f, order) of the high-pass filter in dependence on the measured background noise.

2. (Currently Amended)   ~~A~~ The sound reproduction system as claimed in claim 1, wherein the pass frequency (f) is a frequency between 300 Hz and 2 kHz.

3. (Currently Amended)   ~~A~~ The sound reproduction system as claimed in claim 1, wherein the ~~high~~ high-pass filter is a first order or second order filter.

4. (Cancelled).

5.   (Currently Amended)   ~~A~~ The sound reproduction system as claimed in claim ~~4~~1, wherein the pass frequency is adaptable between 50 and 2 kHz.

6.   (Currently Amended)   ~~A~~ The sound reproduction system as claimed in claim 1, wherein the compressing amplifier is arranged not to amplify a signal having a signal strength below a threshold value.

7.   (Currently Amended)   A sound reproduction system comprising a digital audio signal input, a digital audio signal processor and a digital audio signal output, wherein the digital signal processor comprises a high-pass (HP) filter having a pass frequency (f) between a first and a second frequency, a compressing amplifier for compression and amplification of a signal, at least said amplification being performed after HP filtering, and a clipper for clipping the HP filtered, compressed and amplified signal above a clipping level~~as claimed in claim 1~~, wherein the ~~device~~ sound reproduction system further comprises a measuring device ~~130~~ for measuring background noise, and an adaptor ~~131~~ for adapting one or more parameters ~~for~~ of the compressing amplifier ~~(22)~~ in dependence on the measured background noise.

8.   (Currently Amended)   ~~A~~ The sound reproduction system as claimed in claim 1, wherein the digital audio processor further

comprises a ~~low~~ low-pass filter ~~(23)~~ for filtering the signal provided by the compressing amplifier and for providing an output signal, the pass frequency of the ~~low~~ low-pass filter (f') lying in the range 2 kHz-Fs/2, where Fs is ~~the~~ a sampling frequency.

9. (Currently Amended) A sound reproduction system <u>comprising a digital audio signal input, a digital audio signal processor and a digital audio signal output, wherein the digital signal processor comprises a high-pass (HP) filter having a pass frequency (f) between a first and a second frequency, a compressing amplifier for compression and amplification of a signal, at least said amplification being performed after HP filtering, and a clipper for clipping the HP filtered, compressed and amplified signal above a clipping level</u> ~~as claimed in claim 8~~, wherein the ~~device~~ <u>sound reproduction system further</u> comprises a measuring device ~~130~~ for measuring background noise, and an adaptor ~~131~~ for adapting one or more parameters (f") ~~for~~ <u>of</u> the ~~low~~ <u>low</u>-pass filter <u>in dependence on the measured background noise</u>.

10. (Currently Amended) ~~A~~ <u>The</u> sound reproduction system as claimed in claim 9, wherein the<u> sound reproduction</u> system<u> further</u> comprises ~~a~~ means for activation and/or setting ~~of~~ the frequency dependence of the ~~low~~ <u>low</u>-pass filter in dependence on the amplification in the compressing amplifier.

11. (Currently Amended)   A The sound reproduction system as claimed in any one of the claims 41, 7 or 9, wherein the one or more of the said parameters is a non-linear function of the measured noise level.

12. (Currently Amended)   A The sound reproduction system as claimed in claim 1, wherein the sound reproduction system comprises the high high-pass filter being followed by an AGC followed by a limiter/clipper.

13. (Currently Amended)   A The sound reproduction system as claimed in claim 1, wherein the sound reproduction system further comprises an automatic volume leveler preceded, or preferably, followed by the high high-pass filter, providing a leveled signal, followed by a gain and a clipper.

14. (Currently Amended)   A method for processing digital sound signals in which method comprising the steps of:
    attenuating frequency component components of the a sound signal lower than a cut-off frequency (f) between a first and a second frequency are attenuated,;
    amplifying and compressing the sound signals are amplified and compressed signal to within a signal band width; and
    clipped clipping the sound signal above a clipping level within the signal band width,
wherein said method further comprises the steps of:

measuring a background noise level; and

        determining the cut-off frequency (f) in dependence on the
measured background noise level (S).

15.   (Currently Amended)   A—The method as claimed in claim ~~13~~14,
wherein the cut-off frequency is between 300 Hz and 2 kHz.

16.   (Cancelled).

17.   (Currently Amended)   A—The method as claimed in claim ~~16~~14,
wherein the cut-off frequency is determined by a non-linear
function of the noise level (S).

18.   (Currently Amended)   A—The method as claimed in claim ~~16~~14,
wherein the cut-off frequency ranges between 50 Hz and 2 kHz.

19.   (Currently Amended)   A—The method as claimed in claim ~~13~~14,
wherein said method further comprises, after ~~compression~~ said
amplifying and compressing step and said clipping step, attenuating
frequency components of the resulting digital signal below a ~~cut~~
cut-off frequency f' between 2 and 4 kHz ~~are attenuated~~.

20.   (Currently Amended)   A—The method as claimed in claim 19,
wherein the method further comprises the step of:

_____ ~~a noise level is measured and~~ <u>determining</u> the cut-off frequency (f″) ~~is determined~~ in dependence on the measured <u>background</u> noise level (S).

21. (Currently Amended) ~~A~~ <u>The</u> method as claimed in claim 20, wherein the cut-off frequency (f″) is determined by a non-linear function of the noise level (S).

22. (Cancelled).

23. (Currently Amended) ~~Computer~~ <u>A computer-readable medium having stored thereon a computer</u> program comprising program code means for performing a method as claimed in any one of claims ~~13~~ <u>14, 15 and 17</u> to ~~22~~ <u>21</u> when said program is run on a computer.

24. (Cancelled).